



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,276	11/25/2003	Constantin Donea	143572-1	8751

23413 7590 12/02/2005

CANTOR COLBURN, LLP  
55 GRIFFIN ROAD SOUTH  
BLOOMFIELD, CT 06002

EXAMINER
----------

LONEY, DONALD J

ART UNIT	PAPER NUMBER
----------	--------------

1772

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/723,276	<b>Applicant(s)</b> DONEA ET AL.	
	<b>Examiner</b> Donald Loney	<b>Art Unit</b> 1772	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 13-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>01/22/04_06/29/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Group I in the reply filed on September 12, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Claim Objections***

2. Claim 8 is objected to because of the following informalities: There is no antecedent basis for "the carbon nanotubes". It appears this claim was meant to depend from claim 7. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Aisenbrey (6741221).

Aisenbrey discloses a multiwall sheet comprising a first sheet 40 and second sheet 42 which are connected by what can be considered ribs 60. The sheets contain a

Art Unit: 1772

metallic electrically conductive filler. Refer to figures 4A and 4B along with column 3, line 21 through column 5, line 12.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-6 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aisenbrey.

The primary reference teaches the invention substantially as recited except for the specific polymers of claims 2-6, nanotubes of claim 8, properties of claims 9 and 10 and additives of claim 11. Aisenbrey does each to use any polymer resins produced by GE PLASTICS (the assignee the instant application). See the 35 U.S.C. 102 rejection above.

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to Aisenbrey to use the specific polymers recited motivated by the fact Aisenbrey teaches to use any GE PLASTICS polymers. For claim 8, it would be obvious to substitute one conductive filler for another, motivated by the fact Aisenbrey teaches to include conductive fillers. The properties of claims 9 and 10 would be obvious to one of ordinary skill in the art motivated by the fact one would include the required amount of conductive filler to impart said properties in order to

Art Unit: 1772

conform the product to its desired application. The additives per claim 11 would be obvious as a known means to provide a particular function thereto.

7. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeHeras et al (4773534) in view of Schmitz et al (5360658).

DeHeras discloses a multiwall sheet comprising a first sheet 32 or 35 and second sheet 34 or 36 which are connected by ribs 33. The sheet is disclosed as being made of an electrically conductive plastic. Refer to figures 5-7 along with column 2, line 24-64. DeHeras et al does fail to disclose that an electrically conductive filler is used to impart said conductivity.

Schmitz et al discloses to include carbon black (one of applicants' fillers in claim 7) in a polymer resin in order to provide conductivity thereto. Refer to the Abstract along with column 1, lines 17-22, 40-42 and column 2, lines 58-65.

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to DeHeras et al to include carbon black (or any other conductive filler) in the resin, as taught by Schmitz et al, in order to impart conductivity thereto motivated by the fact DeHeras et al teaches the resin as conductive. The specific polymers per claims 2-6 are obvious to one of ordinary skill motivated by the fact DeHeras et al teaches to use polymer resins and substituting one polymer for another would be obvious to a skilled artisan. The properties of claims 9 and 10 would be obvious to one of ordinary skill in the art motivated by the fact one would include the required amount of conductive filler to impart said properties in order to conform the

Art Unit: 1772

product to its desired application. The additives per claim 11 would be obvious as a known means to provide a particular function thereto.

8. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dobler (6680350) in view of Schmitz et al.

Dobler et al teaches a molding composition for forming glazings there from that contains a variety of resins recited by the applicant in claim 4. Refer to column 4, lines 38-49. The composition can be used to form twin or multi wall sheets (i.e. two sheets interconnected with ribs as applicant recites in claim 1 and shows in figures 1 and 2). Refer to column 10, lines 9-20. It can also contain antioxidants per claim 11. Dobler et al does fail to specifically disclose an electrically conductive filler included in the resin. Dobler et al does disclose generally that it is know to include fillers in the resin (column 8, lines 29-45).

Schmitz et al discloses to include carbon black (one of applicants' fillers in claim 7) in a polymer resin in order to provide conductivity thereto. Refer to the Abstract along with column 1, lines 17-22, 40-42 and column 2, lines 58-65.

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to Dobler et al to include carbon black (or any other conductive filler) in the resin, as taught by Schmitz et al, in order to impart conductivity thereto motivated by the fact Dobler et al teaches that fillers can be included in the resin. The properties of claims 9 and 10 would be obvious to one of ordinary skill in the art motivated by the fact one would include the required amount of conductive filler to impart said properties in order to conform the product to its desired application. The

Art Unit: 1772

additives per claim 11 would be obvious as a known means to provide a particular function thereto.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald Loney whose telephone number is (571) 272-1493. The examiner can normally be reached on Mon, Tues, Thurs and Fri. 8AM-4PM, flex schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Donald Loney  
Primary Examiner  
Art Unit 1772

DJL:D.Loney  
11/27/05